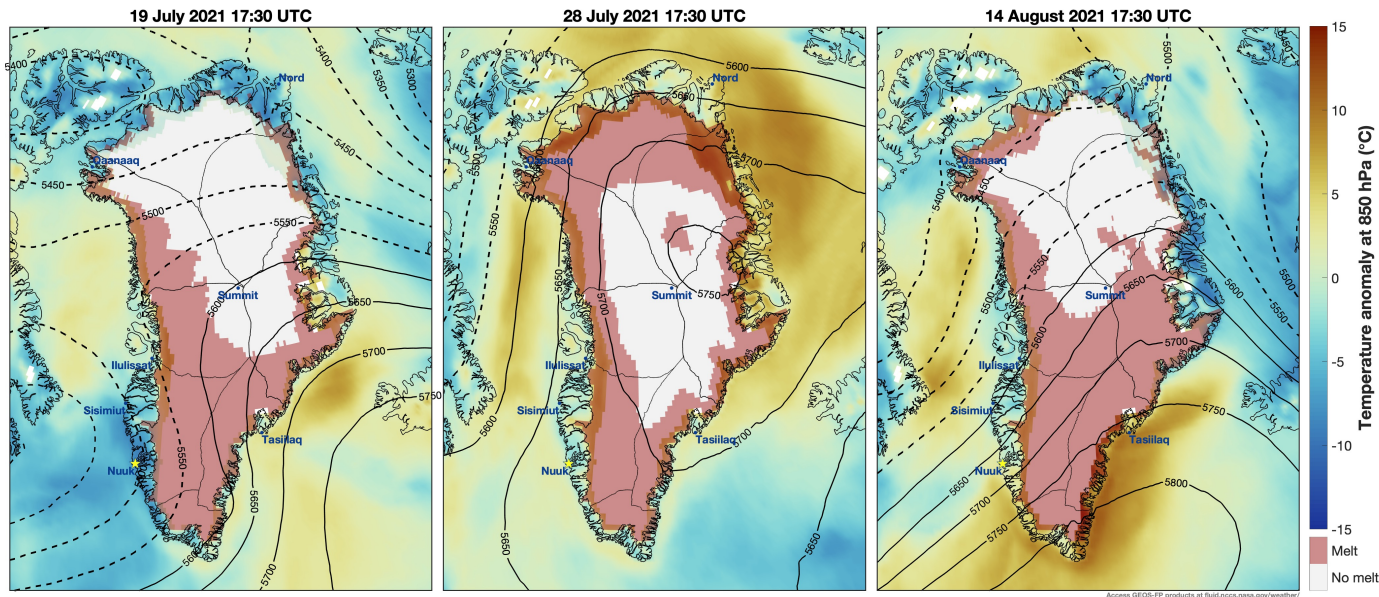


# 2021 Greenland Ice Sheet Melt Events: A Variety Pack



The late-summer of 2021 is remarkable for a series of melt events that have covered large areas of the Greenland Ice Sheet, even extending to its highest point at Summit Station.

These events were captured by GMAO Forward Processing analyses and forecasts. At their peaks, these events produced simultaneous melt over an area ranging from 840,000 to 1.1 million square kilometers.

Three significant Greenland melt events are shown above, indicating 850 hPa air temperature anomaly, ice surface melt extent (red shading), and 500 hPa height (black lines, values less than 5600m are dashed) during peak melt extent for each event (17:30 UTC). The 850 hPa air temperature anomaly is relative to the 15-July to 15-August mean, and ice surface melt extent is determined when the ice surface skin temperature exceeds 0°C.